

REMARKS

Summary of Changes Made

By this Amendment, paragraph 23 of the specification has been amended to correct a spelling error. Further, claims 1, 6 and 9 have been amended to replace the transition "comprising" with "consisting essentially of." Claim 2 has been amended to positively recite the presence of mineral oil or polybutene. Claim 10 has been amended to correct a grammar/usage error. New claim 11 has been added. Accordingly, claims 1-11 remain pending in the application. No new matter has been added by this amendment.

Specification Amendments

The spelling of "esterification" has been corrected in paragraph 23.

Claim Rejections - 35 U.S.C. §102(b) – Bryson

The Examiner rejected claims 1-4 and 6 under 35 U.S.C. 102(b) as being anticipated by Tabara et al., U.S. 3,936,512, ("Tabara"). The Examiner asserts that Tabara discloses a composition comprising 5-40 wt % of at least one polyolefin and 0.01-15 wt % of at least one surfactant. One disclosed polyolefin is a mixture of polyethylene and polypropylene in claim 4. The Examiner contends that Examples 32 and 33 each disclose such embodiments, each having blends of HDPE and isotactic polypropylene, the former having a 3:7 ratio and the latter having a 7:3 ratio. The Examiner asserts that "HDPE is an ethylene copolymer containing at least one alpha olefin, and the isotactic polypropylene is a homopolymer."

The Examiner asserts that Tabara discloses a non-ionic surfactant (polyoxyethylene alkyl ethers and polyoxyethylene sorbitan fatty acid esters) in claims 9 and 10. The Examiner rejects claim 2 over the reference because the phrase "up to" includes zero as a lower limit.

The Examiner will note that claims 1 and 6 have been amended to recite the transition "consisting essentially of" where "comprising" previously was found. The

transition “consisting essentially of” covers all recited elements and only those non-recited elements that do not materially affect the basic and novel characteristics of the claimed invention.

The Examiner asserts that “HDPE is an ethylene copolymer containing at least one α -olefin (Office Action 1/18/05, p. 2, section 2). This is factually incorrect. As is known in the art, the abbreviation HDPE stands for “high density polyethylene.” It is merely polyethylene with a specific density range. Polyethylene is not a copolymer, but rather a **homopolymer** containing residues of only one monomer—ethylene. Tabara discloses several examples of physical blends of polyethylene and polypropylene—using terms like “mixture” (claim 4); “solution” (claim 1); “aggregate/aggregation” (col. 1, line 1). These terms do not comprehend a copolymer, which requires a copolymerization reaction, not merely a physical blending. Further, there is no suggestion or disclosure of a blend of a homopolymer and a rubbery copolymer, as instantly claimed.

Claim 2 has been amended to positively recite the presence of mineral oil or polybutene.

The patentability of claims 3 and 4 is asserted based on the asserted patentability of claim 1, from which they depend, as discussed hereinabove. Based on these distinctions, it is respectfully submitted that the *prima facie* case of anticipation fails, and claims 1-4 and 6 are patentable over Tabara.

Claim Rejections - 35 U.S.C. §102(b) - Rogers

Claims 1-4, 6, and 9 were rejected under 35 U.S.C. 102(b) as being anticipated by Rogers et al., U.S. 5,290,822, (“Rogers”). The Examiner cites Rogers as disclosing a composition comprising a non-elastomeric olefin polymer (ethylene or propylene homopolymer), about 3-30 pw of an elastomer resin, polystyrene, which the Examiner points out is a polyolefin homopolymer resin, and a stability control agent which is a partial ester of long chain fatty acids. One disclosed elastomer is ethylene-propylene copolymer rubber (EPR) having about 30-72 wt % ethylene and 28-70 wt % propylene. The stability control agents are surfactants, including sorbitan oleates and stearates,

and are used at a rate of 0.5-10 pw. The Examiner rejects claim 2 over the reference because the phrase "up to" includes zero as a lower limit.

Rogers is directed toward a foam; the instantly claimed invention is not. The Rogers composition, at its broadest, is a low density polyolefin foam including a thermoplastic olefin, an elastomer, polystyrene, a surfactant, and a blowing agent.

The Examiner will note that claims 1, 2, and 6 have been amended as discussed hereinabove. Claim 9 has been amended to replace "comprising" with "consisting essentially of." It is believed that the amendment of claims 1, 6, and 9 to "consisting essentially of" distinguishes the claimed invention from Rogers inasmuch as the instantly claimed invention is not a foam, and a blowing agent would indeed materially affect the basic and novel characteristics of the claimed invention. Based on the foregoing, it is respectfully submitted that claims 1-4, 6, and 9 are patentably distinguished over the Rogers reference.

Claim Rejections - 35 U.S.C. §103(a) - Rogers

Claim 8 was rejected under 35 U.S.C. 103(a) as unpatentable over Rogers. After admitting that Rogers fails to disclose physical properties of the composition, the Examiner concludes that it is obvious that the Rogers composition exhibits the claimed properties because "it is essentially the same as that of the instant claims," Office Action 1, 1/18/2005, p. 4.

The Examiner will note that claim 6, from which claim 8 depends, has been amended as discussed hereinabove. It is believed that the amendment of claim 6 serves to patentably distinguish claim 8 over Rogers. Further, the application of Rogers to claim 8 in an obviousness rejection is improper inasmuch as Rogers is non-analogous art. Rogers is directed to a low density polyolefin foam. Based on the foregoing, it is believed that claim 8 is patentable over Rogers.

Claim Rejections - 35 U.S.C. §103(a) – Tabara in view of Ohkawa

To continue, the Examiner rejected claims 5 and 7 under 35 U.S.C. 103(a) as unpatentable over Tabara in view of Ohkawa et al., U.S. 4,098,752. The Examiner first admits that Tabara does not specifically identify any polyoxyethylene sorbitan fatty acid esters. However, the Ohkawa reference discloses polyolefin compositions containing such esters as polyoxyethylene sorbitan -monooleate, -trioleate, -monopalmitate, -monostearate and -tristearate. The Examiner concludes that it would have been obvious to use any of the Ohkawa compounds in the Tabara composition, thus producing the subject matter of the instant claims.

The Tabara reference is directed to a non-cellulosic paper made from aggregated polyolefin flakes. Hence it is non-analogous art with respect to the instant invention. The combination of Tabara with Ohkawa is therefore improper. Ohkawa is cited only because it discloses specific polyoxyethylene sorbitan fatty acid esters, yet its combination with Tabara fails to disclose all of the elements of instant claims 5 and 7. It is respectfully submitted that claims 5 and 7 are not obvious in light of the combination of Tabara and Ohkawa, and hence patentable.

Claim Rejections - 35 U.S.C. §103(a) – Rogers in view of Davis

Finally, the Examiner rejected claim 10 under 35 U.S.C. 103(a) as unpatentable over Rogers (referencing Collins U.S. 4,323,458) in view of Davis et al., U.S. 4,333,974 ("Davis"). The Examiner contends that Collins discloses a foamed product. The Davis patent discloses that a foamed product, such as that in Rogers/Collins, may be painted. Hence, the Examiner concludes, it would have been obvious to paint (as disclosed in Davis) a molded product of Rogers.

The combination of Rogers and Davis is improper because each reference is non-analogous art. Rogers relates to low density foam. Davis relates to a foamed structure coated with candy. The Examiner has established that the combination of Rogers and Davis discloses that a foamed article may be painted. This does not, however, support an obviousness rejection of claim 10. Neither Rogers nor Davis individually has any relation to the present invention, and their combination does not

cure this defect. The Examiner has not made out a *prima facie* case of obviousness against claim 10. Applicants respectfully submit that claim 10 is patentable over Rogers and Davis and their combination.

New Claims

New claim 11 has been added to round out claim coverage. New claim 11 is a combination of claims 1 and 5 as originally filed. Claim 5 was rejected as obvious over Tabara in view of Ohkawa. Claim 11 is novel over all cited prior art inasmuch as no reference discloses an impact modified thermoplastic olefin composition comprising a blend of one or more polyolefin homopolymer resins, from about 17% by weight to about 30% by weight of one or more rubbery copolymers comprising at least one alpha olefin, and from about 1.0% to about 8.0% by weight of one or more nonionic surfactants selected from the group consisting of polyoxyethylene sorbitan monolaurate, polyoxyethylene sorbitan monopalmitate, polyoxyethylene sorbitan monostearate, polyoxyethylene sorbitan tristearate, polyoxyethylene sorbitan monooleate and polyoxyethylene sorbitan trioleate.

For the reasons discussed hereinabove relating to the impropriety of the combination of Tabara and Ohkawa, it is believed that claim 11 is non-obvious over those references.

CONCLUSION

In light of the foregoing, it is respectfully submitted that the present application, including claims 1-11, is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge the same to our Deposit Account No. 06-0625, our Order No. FER-15009.

Respectfully submitted,

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